APPENDIX C

Course Descriptions for Phase I Intern Training

Advanced Conventional Ammunition Orientation

AMMO-1 (formerly AMMO-C-16B)

SCOPE: This course provides the Quality Assurance Specialist (Ammunition Surveillance) (QASAS) and Ammunition Management Intern with the technical information on each of the various groupings of conventional ammunition. Training includes: identification and functioning characteristics of items typical to each group, common and unique safety considerations for both individual groups and items within groups, identification and functioning of typical components, identification and military application of both the explosive and non-explosive fillers, and the objectives and ramifications of the Ammunition Stockpile Reliability Program (ASRP). Field trips will be scheduled to reinforce classroom training, and to provide students the opportunity to observe practical applications of presented materials.

COURSE CONTENT (HOURS):

1 - Small Arms Ammunition (16)
2 - Fuzes (8)
3 - Mortar Ammunition (16)
4 - Medium Caliber Ammunition (20)
5 - Large Caliber Ammunition (20)
6 - Navy Gun Ammunition (8)
7 - Bombs (16)
8 - Mines (16)
9 - 20 MM - 40 MM Ammunition (8)

10 - Grenades (12)
11 - Rockets (12)
12 - Demolition Materials (24)
13 - Pyrotechnics, Cartridge Actuated Devices/Propellant Actuated Devices (CAD/PAD), Smoke Pots (24)
14 - Ammunition Stockpile Reliability Program (ASRP) (16)
15 - Field Trip (16)
16 - Comprehensive Examination/Critique (8)

Total academic hours: 240

Ammunition Demilitarization

AMMO-4 (formerly AMMO-C-5)

SCOPE: This course provides training for ammunition personnel in the various methods,

procedures, and techniques of performing ammunition demilitarization. Emphasis is placed on procedures required for open burning and detonation. Students are introduced to the emerging technologies for resource recovery and recycling. This course includes a live explosives exercise in which each student will conduct set up and detonation using both electric and non-electric methods on the demolition range. Training is also provided on the changing impact of environmental requirements and decontamination methods.

COURSE CONTENT (HOURS):

1 - Orientation (2)
2 - Demolition Materials (14)
3 - Operational Safety/Methods for Demilitarization (12)
4 - Demilitarization Technology (8)
5 - Environmental Requirements (4)
6 - Certification of Disposal Operations (8)
7 - Review of Range Standing Operating Procedures (SOPs) (8)
8 - Demolition Range Exercise (48)

Total academic hours: 104

Ammunition Facilities

AMMO-5 (formerly AMMO-L-27)

SCOPE: This course is designed to familiarize personnel assigned to various munitions-related disciplines with ammunition storage facilities, and different types of open storage. It also reviews processes used to submit construction plans to the Department of Defense Explosives Safety Board (DDESB). Personnel will become familiar with the different types of Toxic Demilitarization facilities, the Deactivation Furnace (APE 1236) facility, Less Than Truckload/Less Than Car Load (LTL/LCL) facility, ammunition surveillance workshop, ammunition maintenance facility, marine terminal facilities and the general terms used in Quantity Distance/Net Explosive Weight in relation to facilities.

COURSE CONTENT (HOURS):

1 - Ammunition Facilities and Open Storage (12)
2 - Processes for Submitting Site and Construction Plans (4)
3 - Conventional/Toxic Demilitarization Facilities/APE 1236 (4)
4 - Identification/Functions of LTL/LCL Facilities, Surveillance Workshop, Ammunition Maintenance (8)
5 - Quantity Distance/Net Explosive Weight Terms (2)
6 - Marine Terminal Facilities (2)

Total academic hours: 32

Ammunition Financial Management

AMMO-6 (formerly AMMO-L-20)

SCOPE: This course is designed to familiarize personnel, assigned to various munitions-related disciplines, with an overall view of the functions of ammunition financial management from initial requirements determination up through Congressional budget submission and follows the flow of funds back down to the user level. Discussions encompass: requirements determination and validation, budget formulation, types of financial authorizations, the Future Year Defense Program (FYOP), the Army Working Capital Fund (AWCF), the Conventional Ammunition Working Capital Fund (CAWCF), the DOD Planning, Programming, and Budgeting System (PPBS), the Army Planning, Programming, Budgeting, and Execution System (PPBES), and a look at financial management reform initiatives.

COURSE CONTENT (HOURS):

1 - Financial Management: Army-Wide View (16)
2 - Financial Management: Annual Reports of the Secretary of Defense and the U.S. Army Industrial Operations Command (8)
3 - Financial Management: Single Manager for Conventional Ammunition Responsibilities (16)

Total academic hours: 40

Ammunition Life Cycle Management

AMMO-7 (formerly AMMO-L-4)

SCOPE: This course provides a basic knowledge of the concepts of life cycle management as applied to ammunition. Course content contains an introduction to the concepts of logistics management with emphasis in the ammunition area. Also provided is an overview of logistics concepts, the ammunition life cycle, and the integrated logistic support of ammunition.

COURSE CONTENT (HOURS):

1 - Orientation (1)
2 - Logistics Concepts (General) (16)
3 - The Ammunition Life Cycle (12)
4 - Integrated Logistics Support (ILS) (11)

Total academic hours: 40

Ammunition Quality Systems

AMMO-10 (formerly AMMO-L-7)

SCOPE: This course provides familiarization training to ammunition personnel in the requirements of the International Organization for Standardization (ISO) 9000 series and the

Contractor Performance Certification Program (CP)2 quality systems standards and their application to ammunition operations. Course content also includes detailed coverage of ISO 8402 quality assurance and quality management vocabulary, statistical sampling techniques for both product acceptance and audit purposes in accordance with ANSI/ISO/ASQC and military standards, Statistical Process Control (SPC) for short and long-runs of production, and audit program management and auditor skills. Product acceptance sampling techniques cover attributes and variables acceptance inspection of both lot and continuous production environments as contained in ANSI/ASQC Z1.4-1993, MIL-STD-1916, MIL-STD 1235C, and MIL-STD 414. Coverage of general and special topics such as design of sampling plans, skip-lot and isolated-lot, chain, discovery, and estimation sampling procedures are included. The SPC subcourse provides training on constructing and analyzing both attributes and variables control charts. The Auditing subcourse includes training in ammunition surveillance and contractor monitoring procedures as required by IOCR 702-2 as well as training in audit planning, execution, and follow-up techniques and auditor skills as prescribed by the ISO Technical Committee 176, the American Society for Quality Control (ASQC), and the International Auditor and Training Certification Association (IATCA).

COURSE CONTENT (HOURS):

1 - ISO 9000 Series and Contractor Performance Certification Program (CP)2 20)
2 - Math Refresher and Calculator Operations (8)
3 - Statistical Sampling Techniques for Product Acceptance and Audits (52)
4 - Statistical Process Control (40)
5 - Ammunition Quality Systems Auditing (40)

Total academic hours: 160

Ammunition Surveillance Applications I

AMMO-14 (formerly AMMO-C-45)

SCOPE: This course introduces students to those basic procedures and actions associated with inspecting a varied range of ammunition items to determine serviceability, to include applicable computer generated forms and reports. Students will also be introduced to the procedures performed to certify facilities as suitable for storing ammunition or housing ammunition operations. The highlight of this course is a five week application portion where students actually perform serviceability inspections and tests on a range of live ammunition items, to include actual function testing of a designated item. Students will be required to determine all the equipment, tools, and reference materials needed to perform these inspections and tests. In addition, they will also be required to develop a Standing Operating Procedure (SOP) for the inspections and tests to be performed. Students will be afforded the opportunity to observe an on-going ammunition maintenance operation either on-site or at a Temporary Duty (TDY) location.

COURSE CONTENT (HOURS):

1 - Introduction to Surveillance (40)
2 - Standard Depot System (40)
3 - Preparation of Inspection SOPs (40)
4 - Surveillance Workshop (200)
5 - Maintenance (104)
6 - Facilities Inspection (40)
7 - Unit Basic Load (UBL) Inspection (16)
8 - Receipt Inspection (16)
9 - Missile Surveillance (24)

Total academic hours: 520

Ammunition Surveillance Applications II

AMMO-15 (formerly AMMO-C-48)

SCOPE: This course instructs students on the methods, references, and materials used to properly block and brace ammunition items in various packaged configurations on/in various types of conveyances. In addition to blocking and bracing, other aspects of inspecting loaded conveyances to assure compliance with pertinent safety and regulatory requirements will be discussed. Emphasis will be placed on executing DD Form 626, Motor Vehicle Inspection Report. This course will also furnish instructions on the duties associated with surveillance personnel staffing the shipping desk, with emphasis on those procedures necessary to clear ammunition for shipment.

COURSE CONTENT (HOURS):

1 - Loaded Conveyance Inspection (28)
2 - Shipping Desk Procedures (12)

Total academic hours: 40

Army Explosives Safety Standards

AMMO-16 (formerly AMMO-C-53)

SCOPE: This course provides in-depth training in ammunition explosives safety. Training includes review of publications, databases, and other sources of information from which explosives safety technical data may be extracted; identification of explosives hazard classes and item compatibility groups for safe storage and transport; application of explosives safety standards in determining explosives limits and computation of quantity distance requirements; preparation/evaluation of site plans and preparation of waivers and exemption requests; review of malfunction investigative procedures; explosives accident investigation; implementation of proper range safety procedures and safety requirements for explosives operations; and application of electrical safety and lightning protection requirements. Subcourse 6, Electrical Explosives Safety for Army Facilities is exactly the same curriculum as AMMO-28, Electrical

Explosives Safety for Army Facilities.

COURSE CONTENT (HOURS):

1 - Hazard Classification and Storage Compatibility (7)
2 - Explosives Safety Standards (40)
3 - Waivers, Exemptions, and Certificates of Compelling Reasons (3)
4 - Site Plans (20)
5 - Operational Safety (26)
6 - Electrical Explosives Safety for Army Facilities (24)

Total academic hours: 120

Basic Conventional Ammunition Orientation

AMMO-17 (formerly AMMO-C-16A)

SCOPE: This is the introductory course for those individuals entering the Quality Assurance Specialist (Ammunition Surveillance) (QASAS) and Ammunition Management Career Intern Programs. The training emphasizes use of Department of Defense (DOD), Army, Navy, and Air Force publications, databases, drawings, and specifications for extracting ammunition related information, and furnishes practical training in drafting correspondence and reports.

COURSE CONTENT (HOURS):

1 - Orientation (2)
2 - Sources of Information - DOD (22)
3 - Sources of Information - Army (24)
4 - Sources of Information - Navy (10)
5 - Sources of Information - Air Force (14)
6 - Correspondence and Report Writing (24)
7 - Ammunition Drawings (28)
8 - Packing and Marking (8)
9 - Tools and Gages (12)
10 - USADAC Tour (8)
11 - Characteristics of Explosives and Propellants (16)

Total academic hours: 168

Chemical Accident/Incident Response & Assistance (CAIRA)

AMMO-19 (formerly AMMO-M-24)

SCOPE: This course provides information on all phases of CAIRA, but places emphasis on the readiness phase which ties directly into the Chemical Stockpile Emergency Preparedness

Program (CSEPP) in the development of emergency action plans with the local community. This course prepares students to identify chemical agents by physical symptoms, physical properties, symbols, and the appropriate self-aid/buddy-aid prescribed for each agent. Students will be able to associate air monitoring capabilities, protective clothing requirements, and appropriate decontaminants for each chemical agent. Students will be able to describe the establishment and performance of hot line operations.

COURSE CONTENT (HOURS):

1 - CAIRA Overview (4)
2 - Fundamentals of Chemical Activities (7)
3 - Structures and Responsibilities (3)
4 - Phases of CAIRA (6)
5 - Concept of Operations (5)
6 - Exercises and Evaluations (4)

Total academic hours: 29

Chemical Hazard Prediction

AMMO-23 (formerly AMMO-M-7)

SCOPE: This course provides the fundamentals required to model downwind chemical hazards using the D2PCw and Geographical Information System (GIS) programs, which are part of the Emergency Management Information System (EMIS). Students will receive instruction on toxic chemical agents and munitions in the Army stockpile, their physiological effects, symptoms of exposure, and the physical properties influencing dispersion of agents in the atmosphere. The impact of weather conditions, terrain contours, wind speed, cloud cover, and solar radiation will be discussed as they pertain to the Pasquill Stability Category. Forty percent of class time will be hands-on training in the operation of D2PCw and the EMIS GIS. Emphasis is on downwind hazard prediction along with gaining the ability to analyze program results.

COURSE CONTENT (HOURS):

1 - Agents, Munitions and Containers (4)
2 - Estimation of Chemical Hazard Distance (7.5)
3 - Downwind Hazard Prediction Using EMIS 3.1 (24.5)

Total academic hours: 36

Conventional Ammunition Radiation Hazards

AMMO-27 (formerly AMMO-C-16A)

SCOPE: This course provides in-depth training to individuals responsible for handling, shipment, storage, maintenance and demilitarization of conventional ammunition containing

radioactive materials. It will provide information on the radiation aspects of conventional ammunition components and associated hardware. Course material will cover U238 (Depleted Uranium) associated with a variety of ammunition items and Pm147 (Promethium) found in Light Antitank Weapons (LAW). The course begins with atomic fundamentals and expands into all areas providing students the knowledge to store, handle, ship, and perform maintenance IAW regulatory requirements.

COURSE CONTENT (HOURS):

1 - Orientation (1)
2 - Fundamentals of Radiation Hazards (10)
3 - Radiation Safety for Ammunition Items, Storage and Transportation (9)
4 - Examination and Close-out (4)

Total academic hours: 24

Environmental Considerations for Ammunition Personnel

AMMO-31 (formerly AMMO-C-32)

SCOPE: This course provides the ammunition professional with the principles of environmental compliance that must be taken into account during all phases of ammunition and explosives operations. The course provides current Environmental Protection Agency (EPA), and Department of Defense (DOD) guidance, to include the Munitions Rule (MR) regarding the generation, storage, transportation, treatment and disposal of ammunition and explosives hazardous wastes. This course does not provide training in hazardous waste emergency response and clean-up.

COURSE CONTENT (HOURS):

1 - Introduction (0.5)
2 - Environmental Laws and Regulations (7.5)
3 - DOD and Service Specific Guidance (3)
4 - Identification of Hazardous Constituents (4)
5 - Hazardous Waste Minimization (2)
6 - Hazardous Waste Management (12)
7 - Examination (3)

Total academic hours: 32

Guided Missile/Large Rocket Technical Training

AMMO-38 (formerly AMMO-C-44)

SCOPE: This course provides an introductory overview of the policies, procedures, and principles governing the operational characteristics and management of guided missiles/large

rocket systems. Students are provided a basic familiarization with specific aspects of various missile or large rocket systems such as: basic structures, explosives components, shipping, storage and handling procedures, system and tactical operations, and surveillance/inspection procedures.

COURSE CONTENT (HOURS):

1 - Introduction (12)
2 - Patriot (4)
3 - Stinger (4)
4 - Hellfire (4)
5 - Dragon/Javelin (10)
6 - Tow (4)
7 - Multiple Launch Rocket System (MLRS)/Army Tactical System (ATACMS) (10)
8 - Examinations (8)

Total academic hours: 56

Installation Traffic Management of Hazardous Materials

AMMO-41 (formerly AMMO-L-9)

SCOPE: This course provides students with a basic understanding of United States and International laws, as well as Department of Defense (DOD) regulations governing transportation of hazardous materials, and satisfies the mandatory training for persons who certify hazardous materials and conduct function specific training for subordinate personnel as specified in the Defense Transportation Regulation (DOD 4500-9R). The focus is on transportation of ammunition and explosives. Students who successfully complete the course will be able to identify, package, mark, label, load, and complete/certify documentation for transportation of hazardous cargo by all modes of transport. Inspection criteria for motor vehicles and railcars carrying hazardous materials are included. Students will learn to interpret unitization and outload drawings (blocking and bracing) for motor vehicles and railcars. The course also covers operations of both headquarters and installation traffic management offices. Students will be introduced to freight traffic procedures from the Transportation Officer's point of view.

COURSE CONTENT (HOURS):

1 - Orientation (3)
2 - Basic Hazardous Material Shipping Information (11)
3 - Hazardous Materials Communications, Emergency Response Information, and Segregation of Hazardous Material (23)
4 - Safety Shipment of Hazardous Material by Vessel (7)
5 - Shipment of Hazardous Material by Commercial Air (17)
6 - Security Requirements (2)
7 - Shipment of Hazardous Material by Military Air (19)

8 - Unitization, Blocking and Bracing Drawings (12)
9 - Vehicle Inspection Requirements (10)
10 - Guest Speakers (20)
11 - Headquarters Level Traffic Management (4)
12 - DOD Single Manager of Transportation (2)
13 - Installation Traffic Management Procedures (30)

Total academic hours: 160

Intermodal Dry Cargo Container CSC Reinspection

AMMO-43 (formerly AMMO-L-10)

SCOPE: This course provides students with information required to reinspect intermodal dry cargo containers IAW the CSC standards. Course content includes survey of CSC test requirements; detailed analysis of reinspection criteria required by CSC, U.S. Public Law, and Joint Service Regulations; and orientation of container structural and non-structural components. Reporting requirements and reinspection decal placement are also discussed.

COURSE CONTENT (HOURS):

1 - Orientation (0.5)
2 - Overview of Containerization (4.5)
3 - Structure of Containers (2)
4 - Inspection Criteria (17)

Total academic hours: 24

Preparation of Standing Operating Procedures (SOPs) for Ammunition & Explosives Operations

AMMO-54 (formerly AMMO-C-17)

SCOPE: This course is designed to familiarize personnel engaged in ammunition operations SOP preparation and review with the Army Material Command (AMC) regulatory requirements and procedures governing SOPs. Course curriculum provides current regulatory requirements on SOP format and content. Through a series of exercises, students are acquainted with procedures for preparation and review of SOPs.

COURSE CONTENT (HOURS):

1 - Orientation (1)
2 - Regulatory Guidance (3)
3 - AMC-R 700-107 (4)
4 - Risk Management and Hazard Analysis (4)
5 - Workshops for SOP Writing and SOP Review (24)

6 - Examination and Close-out (4)

Total academic hours: 40

Quality Assurance for Toxic Chemical Munitions

AMMO-55 (formerly AMMO-T-33)

SCOPE: This course covers surveillance inspection intervals, sample sizes/classification of defects for all toxic chemical inspections, and related reporting requirements. It also teaches Leak test requirements, frequencies, containerization of leakers, and the leaker reporting process. Students don protective equipment and perform a storage monitoring inspection, to include completion of required inspection reports.

COURSE CONTENT (HOURS):

1 - Quality Assurance for Toxic Chemical Munitions (24)

Total academic hours: 24

Risk Management for Ammunition Operations

AMMO-56 (formerly AMMO-C-35)

SCOPE: This course will provide students with the procedural and process tools necessary for identification and evaluation of ammunition operational hazards. The students will make appropriate recommendations for elimination, reduction, or acceptance of hazards. Through a series of exercises students will demonstrate the use and benefits of thoughtful risk assessment within the framework of the risk management process.

COURSE CONTENT (HOURS):

1 - Orientation (1)
2 - Background of Risk Assessment (1)
3 - Concepts of Risk Management Process (2)
4 - Risk Management Process and Workshop (22)
5 - SOP Requirements and Review Processes (10)
6 - Examination and Close-out (4)

Total academic hours: 40

Technical Chemical Surety Materiel

AMMO-61 (formerly AMMO-M-8)

SCOPE: This course covers descriptions of toxic chemical agents, their effects, symptoms from exposure, and self-aid/buddy aid treatments of effects. Types of munitions, containers, protective clothing, and detection equipment, along with detection capabilities and decontamination procedures, are discussed. The Personnel Reliability Program (PRP) is identified and defined. Chemical Accident/Incident Response and Assistance (CAIRA), to include types of emergencies, agent hazard prediction capabilities, and effects of weather and terrain, are examined. Current and proposed methods for disposal/demilitarization of surety agents are also discussed.

COURSE CONTENT (HOURS):

1 - Introduction to TCSM (1.5)
2 - Surety Agents (7)
3 - Detection and Identification (8)
4 - Protective Clothing and Equipment (11.5)
5 - Munitions/Containers (5)
6 - Safety and Storage Criteria (10)
7 - Surety and Security Programs (6)
8 - Disposal (6)
9 - CAIRA (8)

Total academic hours: 63

Intern Leadership Development Course (ILDC)

Scope: This course provides interns with an understanding of the structure of the US Army, the Army's leadership competencies, and a familiarization with their emerging roles as tomorrow's leaders. ILDC teaches about:

- The US Army organization and the interns' roles in it;
- Personal learning style and how it supports the Army's leadership competencies of communication, team development, and decision making and professional ethics;
- Team building and group dynamics;
- Leadership styles that provide purpose, direction and motivation and when to use the appropriate style;
- Individual values and how they affect decisions and professional ethics.

ILDC is a mandatory Priority I course for all DA Interns

Total academic hours: 40 hours

Action Officer Development Course (AODC)

Scope: An action officer is a staff member with subject matter expertise who "works actions" on behalf of senior staff officers or commanders. The term "action officer" does not refer to a duty position. This course describes "staff work" as it is generally practiced Army-wide. The AODC covers organization and management; conducting completed staff work; managing time and priorities; conducting meetings and interviews; solving problems and making decisions; communications; writing to the Army Standard; coordinating; conducting briefings; and ethics.

Course is available via Distance Learning at no cost to the student.

AODC is a mandatory Priority I course for all DA Interns

Total academic hours: